CLAIMS

1. A *C.trachomatis* protein having the MW and pI characteristics of protein 5, 6, 7, 8, 9, 11, 13, 14, 15, 16, 17, 18, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, or 55, as set out in Table II on page 15.
2. A protein according to claim 1 having, in the L2 strain of *C.trachomatis*, an N-terminal amino acid sequence disclosed in Table III on page 16.
3. A protein having 50% or more sequence identity to a protein according to claim 1
4. A protein comprising a fragment of at least 7 consecutive amino acids of a *C.trachomatis* protein according to claim 1
5. An antibody which binds to a protein according to any one of claims 1 to 4.
6. Nucleic acid encoding a protein according to any one of claims 1 to 4.
7. Nucleic acid having 50% or more sequence identity to the nucleic acid of claim 6.
8. Nucleic acid which can hybridise to the nucleic acid of claim 6.
9. Nucleic acid comprising a fragment of 10 or more consecutive nucleotides of the nucleic acid according to claim 6.
10. A vector comprising nucleic acid according to claim 6.
11. A host cell transformed with a vector according to claim 10.
12. A composition comprising a protein according to any one of claims 1 to 4, an antibody according to claim 5, and/or nucleic acid according to any one of claims 6 to 9.
13. A protein according to any one of claims 1 to 4, an antibody according to claim 5, and/or nucleic acid according to any one of claims 6 to 9 for use as a medicament or as a diagnostic reagent.
14. A *C.trachomatis* protein having the MW and pI characteristics of protein 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, or 55 (as set out in Table II on page 15) for use as a chlamydial immunogen.

15. The use of a protein according to any one of claims 1 to 4, an antibody according to claim 5, and/or nucleic acid according to any one of claims 6 to 9, in the manufacture of a medicament for treating or preventing infection due to *Chlamydia*.

16. The use of a protein according to any one of claims 1 to 4, an antibody according to claim 5, and/or nucleic acid according to any one of claims 6 to 9, in the manufacture of a diagnostic reagent for detecting the presence of *Chlamydia* or of antibodies raised against *Chlamydia*.

17. The use of a protein according to any one of claims 1 to 4, an antibody according to claim 5, and/or nucleic acid according to any one of claims 6 to 9, in the manufacture of a reagent which can raise antibodies against *Chlamydia*.

18. A method of treating a patient, comprising administering to the patient a therapeutically effective amount of a protein according to any one of claims 1 to 4, an antibody according to claim 5, and/or nucleic acid according to any one of claims 6 to 9.

19. A process for producing a protein according to any one of claims 1 to 4, comprising the step of culturing a host cell according to claim 11 under conditions which induce protein expression.

20. A process for producing a protein according to any one of claims 1 to 4 or nucleic acid according to any one of claims 6 to 9, wherein the protein or nucleic acid is synthesised in part or in whole using chemical means.

21. A process for detecting nucleic acid according to claim any one of claims 6 to 9, comprising the steps of: (a) contacting a nucleic acid probe with a biological sample under hybridising conditions to form duplexes; and (b) detecting said duplexes.

22. A process for detecting a protein according to any one of claims 1 to 4, comprising the steps of: (a) contacting an antibody according to claim 5 with a biological sample under conditions suitable for the formation of an antibody-antigen complexes; and (b) detecting said complexes.

23. A process for detecting an antibody according to claim 5, comprising the steps of: (a) contacting a protein according to any one of claims 1 to 4 with a biological sample under conditions suitable for the formation of an antibody-antigen complexes; and (b) detecting said complexes.

24. A kit comprising reagents suitable for use in a process according to any one of claims 21 to 23.